

Sharon Steel

EPA Region 3 EPA ID# PAD001933175 **Last Update:** August 2002

Pennsylvania

Mercer County **4th** Congressional District **Other Names:** None

Current Site Status

The U.S. Environmental Protection Agency (EPA) is overseeing the cleanup of the Sharon Steel Farrell Works site (the Site). The Phase I Remedial Investigation (Phase I) has been completed. Phase I sampling activities included: soil, ground water monitoring wells, residential wells, slag, sludge, surface water and sediment. Health and ecological risk screening was performed using the Phase I results. EPA determined from the Phase I results that a Phase II Remedial Investigation (Phase II) would be needed to fill data gaps. The data gaps to be addressed during Phase II include: evaluating the deeper groundwater aquifer, collecting ecological samples, performing air modeling, establishing background concentrations of contaminants in the Site area, and obtaining data regarding ground water flow. After Phase I, EPA met with local residents individually to discuss their residential well sampling results, provide fact sheets, respond to questions, and update the residents on the progress of the Remedial Investigation. Additionally, EPA met with Public Officials of Trumbull County (Ohio), Wheatland, West Middlesex, Farrell, Hermitage, and Shenango Township to brief the officials on the results from Phase I

and to discuss the upcoming Phase II. EPA also met with the Ohio Health Department to discuss well sampling results for local residents who are living in Ohio. EPA briefed the Ohio Health Department on the presence of elevated metals in residential well samples and their possible natural occurrence. EPA's contractor and their sub-contractors have recently begun Phase II.

Site Description

The Sharon Steel Corporation Farrell Works Disposal Area site is an area of about 400 acres located in Mercer County in Western Pennsylvania, within a few hundred feet of the Ohio/Pennsylvania border. The site is southwest of the former Sharon Steel Corporation Farrell Works, and is bordered on the east by the Shenango River. Beginning about 1900, the Sharon Steel Corporation used the area to dispose of blast furnace slag, electric arc furnace slag, basic oxygen furnace slag, and sludge. From 1949 to 1981, millions of gallons of spent pickle liquor acid were dumped over the slag. It was thought that the acid would partially evaporate and then be neutralized by the carbonates in the slag. In actuality, groundwater contamination resulted. The site is located in the flood plain of the Shenango River, and there are several wetland areas on site.

Site Responsibility


This site is being addressed through Federal actions.

NPL Listing History

Our country's most serious, uncontrolled, or abandoned hazardous waste sites can be cleaned using federal money. To be eligible for federal cleanup money, a site must be put on the National Priorities List. This site was proposed to the list on March 6, 1998 and formally added to the list on July 28, 1998.

Threats and Contaminants

Contaminants detected in groundwater include arsenic, lead and chromium. In addition, the relatively high pH of the slag materials and the runoff water might pose a threat to human trespassers and to waterfowl and aquatic organisms that might use the several on-site wetland areas.

Contaminant descriptions and associated risk factors are available on the Agency for Toxic Substance and Disease Registry, an arm of the CDC, web site at <http://www.atsdr.cdc.gov/hazdat.html> 

Cleanup Progress

EPA reviewed and approved the Remedial Investigation/ Feasibility (RI/FS) Study and Work Plan from the EPA contractor. Phase I began on July 10, 2000. During Phase I , the EPA contractor collected the following samples: surface soil, sub-surface soil, ground water from shallow monitoring wells and residential wells, slag and sludge, and surface water and sediment. A preliminary screening for risk was done for human health and ecological parameters using the Phase I sample results. A report summarized the Phase I results and EPA has determined what sampling remains to be done in Phase II. Phase II will begin in August 2002. Phase II is needed to fill data gaps to include evaluating the deeper groundwater aquifer, collecting ecological samples, performing air modeling, establishing background concentrations and obtaining data regarding groundwater flow.

During Phase I, EPA received residential well water analytical results indicating that a handful of residential wells located in the vicinity of the Site slightly exceeded or were just below the new Maximum Contaminant Level (MCL) for arsenic. The MCL for arsenic dropped from 50 parts per billion to 10 parts per billion. Follow-up well sampling confirmed the presence of arsenic in residential wells at levels consistent with those originally identified.

Based on the results of Phase I, ground water in the vicinity of the Site flows in a southeasterly direction towards the Shenango River. The residences with wells exhibiting slightly elevated levels of arsenic are located to the west of the Site and are not likely to be impacted by ground water contamination originating from the Site. Therefore, it appears that the arsenic identified in local residential wells may occur naturally as a component of local soil and underlying rock formations. In Phase II EPA will complete the investigation and define if any elevated metal levels identified in select residential wells are coming from Site contamination.

Local elected officials and the community of Farrell have been

advised of EPA's actions which will lead to remedial activities the site. Interest was shown by aggregate or road material producers in the on-Site slag material. EPA has issued two Prospective Purchase Agreements. Farrell Slag, Inc. (Farrell Slag) succeeded in purchasing the area on site, south of Ohio Street. Farrell Slag is in the process of working with EPA and the Pennsylvania Department of Environmental Protection (PADEP) on the permits required for the slag removal to be used for construction purposes.

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Detailed public files (Administrative Record) on EPA's actions and decisions for this site can be examined at the following location:

U.S. EPA Region III
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